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Attachment 5.1 TLD Gamma Exposure Rates - 1996

<u>Area/Location</u>	<u>First Quarter mR/day</u>	<u>Second Quarter mR/day</u>	<u>Third Quarter mR/day</u>	<u>Fourth Quarter mR/day</u>	<u>Annual Average mR/day</u>	<u>Annual Total mR/Yr</u>
Area 1, BJY	0.24	0.24	0.25	0.23	0.24	87
Area 1, Stake TH-28/27	0.26	0.26	0.26	0.27	0.26	96
Area 1, Stake TH-38	0.28	0.29	0.30	0.31	0.30	108
Area 1, Sandbag Storage Hut	0.33	0.32	0.31	0.30	0.31	115
Area 2, Stake M-140	0.32	0.35	0.36	0.32	0.34	122
Area 2, Stake N-8	2.13	2.41	2.21	1.87	2.13	779
Area 2, Stake L-9	0.45	0.52	0.49	0.41	0.46	170
Area 2, Stake M-150	0.34	0.36	0.38	0.30	0.34	123
Area 2, Cable Yard	0.35	0.38	0.38	0.32	0.35	129
Area 2, Stake TH-58	0.22	0.24	0.25	0.24	0.24	88
Area 3, Stake OB-11.5	0.34	0.34	0.33	0.34	0.34	123
Area 3, Stake OB-20	0.23	0.25	0.23	0.24	0.24	86
Area 3, U-3ax/bl South	0.38	Sampling Terminated			0.38	139
Area 3, U-3ax/bl Southeast	0.42	Sampling Terminated			0.42	154
Area 3, U-3ax/bl Northeast	0.56	Sampling Terminated			0.56	204
Area 3, U-3ax/bl Northwest	0.42	Sampling Terminated			0.42	153
Area 3, LANL Trailers	0.31	0.31	0.30	0.31	0.31	112
Area 3, Stake A-6.5	0.40	0.40	0.39	0.39	0.40	145
Area 3, U-3du South	0.41	0.44	Sampling Terminated		0.42	156
Area 3, U-3by South	0.42	0.57	Sampling Terminated		0.50	182
Area 3, U-3bz South	0.39	0.53	Sampling Terminated		0.47	172
Area 3, U-3ey South	0.38	0.51	Sampling Terminated		0.45	166
Area 3, U-3cj North	0.37	0.52	Sampling Terminated		0.45	166
Area 3, U-3bz North	0.51	0.69	Sampling Terminated		0.62	225
Area 3, U-3by North	0.66	(a)	Sampling Terminated		0.66	241
Area 3, U-3co North	2.15	2.89	Sampling Terminated		2.54	931
Area 3, U-3co South	1.49	1.83	Sampling Terminated		1.67	611
Area 3, U-3du North	0.34	0.39	Sampling Terminated		0.37	134
Area 3, Hill Top	0.37	0.34	0.35	0.34	0.35	128
Area 3, RWMS North		New Location	0.35	0.33	0.35	125
Area 3, RWMS East		New Location	0.45	0.41	0.43	157
Area 3, RWMS South		New Location	1.59	1.46	1.51	554
Area 3, RWMS West		New Location	0.36	0.35	0.36	130
Area 3, Ah/at North	0.43	0.35	Sampling Terminated		0.39	141
Area 3, Ah/at South	(a)	0.36	Sampling Terminated		0.36	130
Area 3, Ah/at East	0.35	0.45	Sampling Terminated		0.40	146
Area 3, Ah/at West	0.34	0.33	Sampling Terminated		0.33	122
Area 3, Ah/at South Gate	0.37	0.41	0.36	0.33	0.37	134
Area 4, Stake A-9	2.62	2.58	2.49	2.30	2.48	906
Area 4, Stake M-130	0.29	0.31	0.31	0.27	0.29	107
Area 4, Stake TH-48	0.29	0.31	0.34	0.31	0.31	113

- (a) TLD missing from sampling location.  
 (b) TLD damaged at sampling location.  
 (c) Location inaccessible due to snow.
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Attachment 5.1 (TLD Gamma Exposure Rates - 1996, cont.)

<u>Area/Location</u>	<u>First Quarter mR/day</u>	<u>Second Quarter mR/day</u>	<u>Third Quarter mR/day</u>	<u>Fourth Quarter mR/day</u>	<u>Annual Average mR/day</u>	<u>Annual Total mR/Yr</u>
Area 5, Well 5B	0.30	0.31	0.30	0.29	0.30	109
Area 5, RWMS East 1500'	0.33	0.31	0.35	0.30	0.32	117
Area 5, RWMS East 1000'	0.35	0.35	0.39	0.34	0.35	129
Area 5, RWMS East 500'	0.32	0.32	0.34	0.33	0.33	119
Area 5, RWMS Northeast Corner	0.32	0.30	0.32	0.32	0.31	115
Area 5, RWMS North 1500'	0.35	0.34	0.33	0.32	0.33	122
Area 5, RWMS North 1000'	0.36	0.32	0.35	(a)	0.34	125
Area 5, RWMS North 500'	0.36	0.37	0.37		0.36	131
Area 5, RWMS Northwest Corner	0.36	0.33	0.34	0.34	0.34	125
Area 5, RWMS West 500'	0.36	0.34	0.38	0.35	0.35	129
Area 5, RWMS West 1000'	0.37	0.34	0.35	0.33	0.34	125
Area 5, RWMS West 1500'	0.33	0.31	0.34	0.33	0.33	120
Area 5, RWMS Southwest Corner	0.32	0.31	0.33	0.31	0.31	114
Area 5, RWMS South 500'	0.32	0.33	0.33	0.34	0.33	120
Area 5, RWMS South Gate	0.30	0.28	0.29	0.27	0.28	104
Area 5, RWMS East Gate	0.36	0.34	0.36	0.36	0.35	129
Area 5, RWMS Office	0.33	0.32	0.33	0.31	0.32	116
Area 5, 3.3 Miles SE of Aggregate Pit	0.17	0.17	0.16	0.17	0.17	61
Area 5, WEF West		New Location		0.29	0.29	106
Area 5, WEF South		New Location		0.34	0.34	123
Area 5, WEF East		New Location		0.31	0.31	115
Area 5, WEF North		New Location		0.31	0.31	112
Area 5, RWMS TRU Pad Northeast	2.99	3.84	3.51	3.69	3.53	1290
Area 5, RWMS TRU Pad North	0.93	0.95	0.89	0.76	0.87	317
Area 5, RWMS TRU Pad Northwest	0.29	0.29	0.28	0.30	0.29	105
Area 5, RWMS TRU Pad Southwest	0.32	0.32	0.32	0.30	0.31	114
Area 5, RWMS TRU Pad South	0.45	0.44	0.43	0.44	0.44	161
Area 5, RWMS TRU Pad Southeast	0.34	0.34	0.34	0.30	0.33	119
Area 5, RWMS MSM-1 Southeast	1.95	1.73	1.71	1.86	1.82	664
Area 5, RWMS MSM-1 East	3.42	3.14	3.03	3.29	3.23	1179
Area 5, RWMS MSM-1 Northeast	2.15	1.81	1.69	2.04	1.94	708
Area 5, RWMS MSM-1 North-Northeast	11.03	8.93	8.47	10.66	9.87	3604
Area 5, RWMS MSM-1 North-Northwest	3.30	2.86	2.90	3.03	3.02	1102
Area 5, RWMS MSM-1 Northwest	3.15	2.80	2.82	3.08	2.98	1086
Area 5, RWMS MSM-1 West	7.84	7.31	7.13	8.19	7.68	2804
Area 5, RWMS MSM-1 Southwest	3.31	2.86	2.87	3.21	3.08	1123
Area 5, RWMS MSM-1 South-Southwest	3.50	2.99	2.87	3.24	3.17	1155
Area 5, RWMS MSM-1 South-Southeast	4.34	4.02	4.66	5.07	4.56	1664
Area 5, RWMS MSM-2 Northeast	4.90	4.18	3.70	4.25	4.27	1560
Area 5, RWMS MSM-2 North	9.05	7.84	7.16	8.05	8.05	2937
Area 5, RWMS MSM-2 Northwest	5.01	4.39	4.20	4.85	4.64	1694

- (a) TLD missing from sampling location.  
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Attachment 5.1 (TLD Gamma Exposure Rates - 1996, cont.)

<u>Area/Location</u>	<u>First Quarter mR/day</u>	<u>Second Quarter mR/day</u>	<u>Third Quarter mR/day</u>	<u>Fourth Quarter mR/day</u>	<u>Annual Average mR/day</u>	<u>Annual Total mR/Yr</u>
Area 5, RWMS MSM-2 West	13.07	10.53	10.16	14.07	12.18	4446
Area 5, RWMS MSM-2 Southwest	3.98	3.39	3.28	3.80	3.63	1327
Area 5, RWMS MSM-2 South	6.56	5.77	5.30	6.83	6.20	2263
Area 5, RWMS MSM-2 Southeast	3.83	3.38	3.45	3.89	3.66	1336
Area 5, RWMS MSM-2 East	12.89	10.78	10.50	13.59	12.11	4420
Area 5, RWMS Pit 5 West Side	(a)	0.71	(b)	1.15	0.95	346
Area 5, RWMS Pit 5 East Side	0.54	0.98	4.21	1.25	1.52	554
Area 6, CP-6	0.23	0.21	0.20	0.19	0.21	75
Area 6, CP-2 Logistic Desk	0.18	0.21	Sampling Terminated	0.20	72	
Area 6, CP-50 Calibration Door	0.24	0.23	0.20	0.21	0.22	81
Area 6, CP-50 Calibration Bench	0.20	0.20	0.20	0.19	0.20	72
Area 6, Yucca Oil Storage Area	0.26	0.26	0.34	0.27	0.28	102
Area 6, D-Con Pad Office	0.27	0.27	Sampling Terminated	0.27	98	
Area 6, D-Con Pad Back Room	0.21	0.21	Sampling Terminated	0.21	77	
Area 6, Well 3	0.27	0.29	0.30	0.24	0.27	99
Area 6, Stake TH-1	0.18	0.23	0.19	0.20	0.20	73
Area 6, Stake TH-9	0.24	0.27	0.27	0.28	0.27	97
Area 6, Stake TH-18	0.23	0.25	0.25	0.25	0.24	89
Area 6, Decon Pad Northwest		New Location	0.38	0.36	0.37	136
Area 6, Decon Pad Southwest		New Location	0.36	0.33	0.34	124
Area 6, Decon Pad Southeast		New Location	0.46	0.38	0.39	141
Area 6, Decon Pad Northeast		New Location	0.35	0.31	0.33	122
Area 7, 7-300 Bunker	0.80	0.77	0.75	0.63	0.73	266
Area 7, UE-7ns	0.31	0.31	0.30	0.27	0.29	107
Area 7, Reitman Seep	0.33	0.34	0.33	0.30	0.32	118
Area 8, Stake K-25	0.28	0.28	0.28	0.25	0.27	98
Area 9, 9-300 Bunker	0.34	0.36	0.33	0.27	0.32	116
Area 9, Papoose Lake Road	0.22	0.22	0.20	0.19	0.21	76
Area 9, V&G Roads Junction	0.30	0.30	0.31	0.25	0.28	104
Area 9, Crater U-9cw	0.28	0.33	0.26	0.23	0.27	99
Area 10, SEDAN West	0.81	0.89	0.86	0.75	0.82	301
Area 10, SEDAN East Visitors Box	0.34	0.36	0.36	0.30	0.34	123
Area 10, Stake A-24	0.40	0.43	0.41	0.34	0.39	143
Area 10, Circle and L Roads	0.29	(a)	0.33	0.26	0.29	105
Area 11, Gate 293	0.33	0.34	0.34	0.35	0.34	124
Area 11, East of U11b	0.34	0.31	0.31	0.31	0.32	115
Area 12, Stake TH-68.5	0.24	0.26	0.26	0.27	0.26	94
Area 12, T-Tunnel Pond 2	0.63	0.67	0.84	0.74	0.72	264
Area 12, Upper N Pond	0.30	0.33	0.35	0.35	0.34	123
Area 12, Stake M-168	0.29	0.31	0.33	0.34	0.32	117
Area 12, Upper Haines Lake	0.28	0.33	0.33	0.35	0.32	118

(a) TLD missing from sampling location.

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Attachment 5.1 (TLD Gamma Exposure Rates - 1996, cont.)

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Area 12, Stake M-175	0.33	0.35	0.35	<sup>(a)</sup>	0.34	125
Area 12, Gold Meadows	0.29	0.29	0.27	<sup>(c)</sup>	0.28	102
Area 15, EPA Complex	0.28	0.29	0.28	0.25	0.28	100
Area 15, Office	0.31	0.34	0.34	0.29	0.32	116
Area 15, U-15e Substation	0.26	0.26	0.26	0.23	0.25	93
Area 17, Stake M-190	0.37	0.38	0.41	0.39	0.39	142
Area 18, Stake P-35	0.35	0.39	0.41	0.40	0.39	141
Area 18, Stake A-106	0.39	0.44	0.43	0.43	0.42	154
Area 18, Stake A-83	0.36	0.38	0.38	0.38	0.37	136
Area 19, Stake P-41	0.40	0.42	0.43	0.42	0.42	152
Area 19, Stake P-54	0.35	0.35	0.36	0.37	0.36	132
Area 19, Stake P-66	0.40	0.44	0.45	0.43	0.43	158
Area 19, Stake P-71	0.37	0.40	0.41	0.41	0.40	145
Area 19, Stake C-31	0.36	0.42	0.42	0.40	0.40	146
Area 19, Stake C-27	0.37	0.41	0.45	0.42	0.41	151
Area 19, Stake C-25	0.35	0.40	0.43	0.43	0.40	147
Area 19, Stake C-16	0.41	0.40	0.40	0.39	0.40	146
Area 19, Stake P-77	0.42	0.44	0.45	0.46	0.44	162
Area 19, Stake P-88	0.43	0.48	0.46	0.49	0.47	170
Area 19, Stake P-91	0.44	0.48	0.49	0.48	0.47	172
Area 19, Stake R-29	0.39	0.39	0.42	0.41	0.40	147
Area 19, Stake R-26	0.39	0.43	0.44	0.45	0.43	156
Area 19, Stake R-18	0.35	0.39	0.40	0.41	0.39	142
Area 19, Stake R-8	0.41	0.44	0.46	0.46	0.45	163
Area 19, Stake R-3	0.39	0.48	0.47	<sup>(a)</sup>	0.45	163
Area 19, Gate 19-3P	0.40	0.40	0.41	<sup>(c)</sup>	0.40	147
Area 20, Stake P-116.5	0.37	0.41	0.39	0.38	0.39	141
Area 20, Stake P-124	0.40	0.41	0.41	0.40	0.41	148
Area 20, Stake P-134.5	0.36	0.39	0.40	0.40	0.39	141
Area 20, Stake J-31	0.48	0.55	0.54	0.52	0.52	191
Area 20, Stake J-16	0.35	0.39	0.40	0.38	0.38	139
Area 20, Stake J-6	0.37	0.41	0.42	0.39	0.40	146
Area 20, Stake J-41	0.33	0.36	0.36	0.35	0.35	129
Area 20, Stake LC-4	0.47	0.45	0.44	0.44	0.45	166
Area 20, Stake A-118	0.37	0.41	0.42	0.40	0.40	146
Area 22, Desert Rock Control Tower	0.13	0.16	0.16	0.15	0.15	55
Area 22, Army Well No. 1	<sup>(a)</sup>	0.21	0.21	0.22	0.21	78
Area 23, Building 650 Storage Room	0.17	0.19	0.18	0.17	0.18	64
Area 23, Building 650 Dosimetry	0.12	0.15	0.14	0.14	0.14	51
Area 23, Building 650 Roof	0.12	0.14	0.15	0.14	0.14	50
Area 23, Post Office	0.17	0.18	0.18	0.17	0.18	64

(a) TLD missing from sampling location.

(b) TLD damaged at sampling location.

(c) Location inaccessible due to snow.

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Area 23, Building 610 Gate	0.13	0.14	0.15	0.18	0.15	56
Area 23, Gate 100	0.13	0.14	0.16	0.15	0.15	53
Area 25, NRDS Warehouse	0.32	0.33	0.32	0.31	0.32	115
Area 25, 25-4-P Gate	0.36	0.35	0.35	0.35	0.35	128
Area 25, 25-7-P Gate	0.34	0.32	0.32	0.35	0.33	121
Area 25, E-MAD North	0.29	0.28	0.28	0.27	0.28	102
Area 25, E-MAD East	0.32	0.31	0.32	0.31	0.32	115
Area 25, E-MAD South	0.32	0.31	0.30	0.28	0.30	110
Area 25, E-MAD West	0.30	0.29	0.30	0.28	0.29	106
Area 25, HENRE Site	0.33	0.32	0.33	0.37	0.34	123
Area 25, Jct. Jackass Flats & A27 Roads	0.21	0.21	0.21	0.24	0.22	80
Area 25, Guard Station 510	0.31	0.38	0.33	0.36	0.35	126
Area 25, Yucca Mountain	0.35	0.34	0.34	0.38	0.35	129
Area 27, Cafeteria	0.34	0.34	0.34	0.35	0.34	124
Area 30, Gate 30-3P in Cat Canyon	(a)	0.44	0.43	0.51	0.45	165

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(b) TLD damaged at sampling location.

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